

LAND APPLICATION SITE

THOMAS M. GARTH

GRTMG 1 - 4

GREENE COUNTY

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS

A This land application agreement is made on 7-2-14 between Thomas M. Gault referred to here as "Landowner", and Recyc Systems, Inc, referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

Landowner:

The Landowner is the owner of record of the real property located in Greene Co., Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges

<u>Tax Parcel ID</u>	<u>Tax Parcel ID</u>	<u>Tax Parcel ID</u>	<u>Tax Parcel ID</u>
<u>TM36 Parcel 57</u>			

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one:

- ☒ The Landowner is the sole owner of the properties identified herein.
☐ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

Class B biosolids Water treatment residuals Food processing waste Other industrial sludges
☒ Yes ☐ No ☒ Yes ☐ No ☒ Yes ☐ No ☒ Yes ☐ No

Thomas M Gault
Landowner - Printed Name, Title

Thomas M Gault
Signature

1000 Rea Ridge Rd,
Standardsville, Va. 22977
Mailing Address & Phone Number
434-825-7427

Permittee:

Recyc Systems, Inc, the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Stanko
Permittee - Authorized Representative
Printed Name

Stanko
Signature

PO Box 562 Remington, Virginia 22734
Mailing Address

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Recyc Systems, Inc

County or City: Greene Co.

Landowner: Thomas M. Barth

Landowner Site Management Requirements:

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices.

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
 - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
 - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
 - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
 - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
 - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
 - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
 - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
 - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

 - a. Meat producing livestock shall not be grazed for 30 days,
 - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
 - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

✓ Thomas M. Barth
Landowner's Signature

7-2-14
Date

Same as above
Farm Operator Signature

1000 Pea Ridge Rd.
Stanardsville, VA 22973
434-825-7427
Mailing Address & Phone Number

ADJOINING LANDOWNER WAIVER

DATE: 12-21-14

FARM SITE: Thomas Garth

COUNTY: GREEVE GRTMG

BZ
initial

I hereby give permission for Recyc Systems, Inc. to apply biosolids within 25 feet of my property line. I understand that DEQ provides a 100/50 foot buffer from property lines unless waived by the landowner.

- A 100 foot buffer from wells and springs will be maintained as required by DEQ.
- A 200 foot buffer from occupied residences will be maintained as required by DEQ.

Ronnie Lause
Landowner Signature

COVERS FIELD:
ON 646 From
STREAM to
top of HILL

FARM DATA SHEET

SITE NAME:	Thomas M. Garth	COUNTY:	Greene
OWNER:	Thomas M. Garth	OPERATOR:	Thomas M. Garth
OWNER'S ADDRESS:	1000 Pea Ridge Road Stanardsville, VA 22973	OPERATOR'S ADDRESS:	1000 Pea Ridge Road Stanardsville, VA 22973
OWNER'S TELEPHONE:	434-985-2458	OPERATOR'S TELEPHONE:	434-985-2458
GENERAL FARM TYPE:	Pasture/ Hay	CELL PHONE:	434-825-7427
# CATTLE:	40	EMAIL:	
LAGOON or SLURRY:	None	LATITUDE:	38.292
TOPO QUAD:	Stanardsville	LONGITUDE:	78.468
COMMENTS:	METHOD OF DETERMINATION: Online Maps		
Prior to field operations please check all fields for rock outcrop and slope.			

BB

1-18-18

RECYC SYSTEMS, INC

FIELD DATA SHEET

Field Identification	DEQ Control ID	Gross Acres	Environmentally Sensitive Soils				Hydro Map	Tax Map #	FSA Tract #
			Water Table	Bed Rock/ Shallow	Surf/ Leach	Freq Flood			
GRTMG 1	51079-00163-0000	18.8	-	AsD	-	-	JR 10	36-A-57	T 744 F 2
GRTMG 2	51079-00164-0000	17.4	Sc Nov.-Apr.	AsD	-	Sc Dec.-May	JR 10	36-A-57	T 744 F 1
GRTMG 3	51079-00165-0000	12.1	-	-	-	-	JR 10	36-A-57	T 744 F 3, 13
GRTMG 4	51079-00166-0000	23.4	-	-	-	-	JR 10	36-A-57	T 744 F 4
TOTAL ACRES IN SITE		71.7							

8-25-2020

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Landowner Coordination Form

This form is used by the Permittee to identify properties (tax parcels) that are authorized to receive biosolids and/or industrial residuals, and each of the legal landowners of those tax parcels. A Land Application Agreement-Biosolids and Industrial Residuals from original signature must be attached for each legal landowner identified below prior to land application at the identified parcels.

Permittee: Recyc Systems, Inc

Site Name: Thomas M. Garth

County or City: Greene Co.

Please Print

Signature not required on this page

[illegible]

Report Number: 14-188-0620

Account Number: 70594



www.aaleastern.com

A&L Eastern Laboratories

7521 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC
SUSAN TRUMBO
8455 WHITESHOP RD
CULPEPER VA 22701

Grower:
THOMAS GARTH
GREENE CO

Farm ID:

SOIL ANALYSIS REPORT

Analytical Method(s):
Mehlich 3

Date Received: 07/07/2014

Date Of Analysis: 07/08/2014

Date Of Report: 07/08/2014

Sample ID Field ID	Lab Number	Organic Matter			Phosphorus				Potassium		Magnesium		Calcium		Sodium		pH		Acidity	C.E.C
		%	Rate	ENR lbs/A	Mehlich 3 ppm	Rate	Reserve ppm	Rate	K ppm	Rate	Mg ppm	Rate	Ca ppm	Rate	Na ppm	Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
1 CRTMG	23613	5.6	H	148	31	M			158	VH	159	M	1176	M			5.7	6.73	2.0	9.6
2 CRTMG	23614	6.6	H	150	109	VH			83	L	132	M	1118	M			5.5	6.69	2.4	9.3
3 CRTMG	23615	4.5	M	124	98	H			68	L	236	H	1539	M			6.3	6.81	1.2	11.0
4 CRTMG	23616	6.2	H	150	36	M			192	VH	200	H	894	M			5.5	6.70	2.3	8.9

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO ₃ N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	Cl ppm Rate	Al ppm
1 CRTMG	4.2	13.8	61.3		21.2										
2 CRTMG	2.3	11.8	60.1		25.8										
3 CRTMG	1.6	17.9	70.0		10.6										
4 CRTMG	5.5	18.7	50.2		25.8										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: A&L Eastern Laboratories, Inc.

by *Paulie McGroary*

Paulie McGroary

Report Number: 14-188-0620

Account Number: 70594



www.aleastern.com

A&L Eastern Laboratories

7621 Whitepine Road Richmond, Virginia 23237 (804) 743-9401 Fax (804) 271-6446

Send To: RECYC SYSTEMS INC
SUSAN TRUMBO
8455 WHITESHOP RD
CULPEPER VA 22701

Grower: THOMAS GARTH
GREENE CO

Farm ID:

Date Received: 07/07/2014

Date Of Report: 07/08/2014

SOIL FERTILITY RECOMMENDATIONS

Sample ID Field ID	Intended Crop	Yield Goal	Lime Tons/A	Nitrogen N lb/A	Phosphate P ₂ O ₅ lb/A	Potash K ₂ O lb/A	Magnesium Mg lb/A	Sulfur S lb/A	Zinc Zn lb/A	Manganese Mn lb/A	Iron Fe lb/A	Copper Cu lb/A	Boron B lb/A
1 CRTMG	Adjust pH to 6.8	0	2.0				0						
2 CRTMG	Adjust pH to 6.8	0	2.5				0						
3 CRTMG	Adjust pH to 6.8	0	1.0				0						
4 CRTMG	Adjust pH to 6.8	0	2.5				0						

Comments:

"The recommendations are based on research data and experience, but NO GUARANTEE or WARRANTY expressed or implied, concerning crop performance is made."

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Pauric McGroary

THE PLANNER IS NOT STATE CERTIFIED

Nutrient Management Plan Balance Sheet
(Spring, 2018-Summer, 2020)
Thomas M. Garth
Planner: John Doe

Tract: 744 Location: Greene
(N = N based, 1P = P based, 1.5P = P based at 1.5 removal, 0P = No P allowed)

Field CFSA No. /Name	Size (ac) Total/ Used	Yr.	Crop	Needs N-P-K (lbs/ac)	Leg /Man Resid	Manure/Biosld Rate & Type (season)	IT (d)	Man/Bios N-P-K (lbs/ac)	Net = Needs - appld N-P-K (lbs/ac)	Sum P rem cred	Commercial N-P-K (lbs/ac)	Notes	
2/GRTMG 1(N)	18/18	2018	Grass Pasture	50-80-0	0/0				50-80-0	N/A			
1/GRTMG 2(N)	20/20	2018	Hay/Pasture	120-40-170	0/0				120-40-170	N/A			
3. 13/GRTMG 3(N)	14/14	2018	Fescue grass hay mt.	90-50-185	0/0				90-50-185	N/A			
4/GRTMG 4(N)	21/21	2018	Grass Pasture	50-80-0	0/0				50-80-0	N/A			

Commercial Application Methods:
br - Broadcast ba - Banded sd - Sidedress

Notes:

Soil Test Summary

Tract	Field	Acre	Date	P2O5	K2O	Lab	Soil pH	Lime Date	rec. lime tons/Ac
744	GRTMG 1	18	2014-Su	M (31 P ppm)	H (158 K ppm)	A&L MIII	5.7		
744	GRTMG 2	20	2014-Su	H+ (109 P ppm)	M (83 K ppm)	A&L MIII	5.5		
744	GRTMG 3	14	2014-Su	H (98 P ppm)	M- (68 K ppm)	A&L MIII	6.3		
744	GRTMG 4	21	2014-Su	M (36 P ppm)	H (192 K ppm)	A&L MIII	5.5		

Field Productivities for Major Crops

Tract Name	Tract/ Field	Field Name	Acres	Predominant Soil Series	Corn	Small Grain	Alfalfa	Grass Hay	Environmental Warnings
744	744/2	GRTMG 1	18	Braddock	IIIb	II	III	III	
	744/1	GRTMG 2	20	Buckhall	IIIb	II	III	III	
	744/3, 13	GRTMG 3	14	Braddock	IIb	I	II	II	
	744/4	GRTMG 4	21	Braddock	IIIa	II	II	III	

Yield Range

Field Productivity Group	Corn Grain Bu/Acre	Barley/Intensive Wheat Bu/Acre	Std. Wheat Bu/Acre	Alfalfa Tons/Acre	Grass/Hay Tons/Acre
I	>170	>80	>64	>6	>4.0
II	150-170	70-80	56-64	4-6	3.5-4.0
III	130-150	60-70	48-56	<4	3.0-3.5
IV	100-130	50-60	40-48	NA	<3.0
V	<100	<50	<40	NA	NA

Farm Summary Report

Plan: **New Plan** **Spring, 2018 - Summer, 2020**

Farm Name: **Thomas M. Garth**

Location: Greene

Specialist: John Doe

N-based Acres: 72.6

P-based Acres: 0.0

Tract Name: **744**

FSA Number: 744

Location: Greene

Field Name: **GRTMG 1**

Total Acres: 17.70 Usable Acres: 17.70

FSA Number: 2

Tract: 744

Location: Greene

Slope Class: C Hydrologic Group: C

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Su-2014	5.7	M(31 P ppm)	H(158 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
---------	--------	-------------

12	AsD	Ashe
45	BcB	Braddock
19	BcC	Braddock
16	EnC3	Elioak
9	MvB	Meadowville

Field Warnings:

Field Name: GRTMG 2

Total Acres: 20.00 Usable Acres: 20.00

FSA Number: 1

Tract: 744

Location: Greene

Slope Class: C Hydrologic Group: C

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Su-2014	5.5	H+(109 P ppm)	M(83 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
6	AsD	Ashe
34	BcB	Braddock
34	BuC	Buckhall
1	BuD	Buckhall
2	EIB	Elioak
9	EnC3	Elioak
8	MvB	Meadowville

6

Sc

Codus Suches

Field Warnings:**Field Name:** GRTMG 3

Total Acres: 14.20 Usable Acres: 14.20

FSA Number: 3, 13

Tract: 744

Location: Greene

Slope Class: B Hydrologic Group: C

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Su-2014	6.3	H(98 P ppm)	M-(68 K ppm)	A&L Mill	

Soils:

PERCENT	SYMBOL	SOIL SERIES
94	BcB	Braddock
6	EnD3	Elioak

Field Warnings:**Field Name:** GRTMG 4

Total Acres: 20.70 Usable Acres: 20.70

FSA Number: 4

Tract: 744

Location: Greene

Slope Class: C Hydrologic Group: C

Riparian buffer width: 0 ft

Distance to stream: 0 ft

Conservation Practices:

Pasture (>75% cover)

P-Index Summary

N-based

Phosphorus Limit method: Phosphorus Environmental Threshold (PET) method

Soil Test Results:

DATE	PH	P	K		Lab
Su-2014	5.5	M(36 P ppm)	H(192 K ppm)	A&L MIII	

Soils:

PERCENT	SYMBOL	SOIL SERIES
26	BcB	Braddock
54	BcC	Braddock
8	BuD	Buckhall
9	EnC3	Elioak
4	MvB	Meadowville

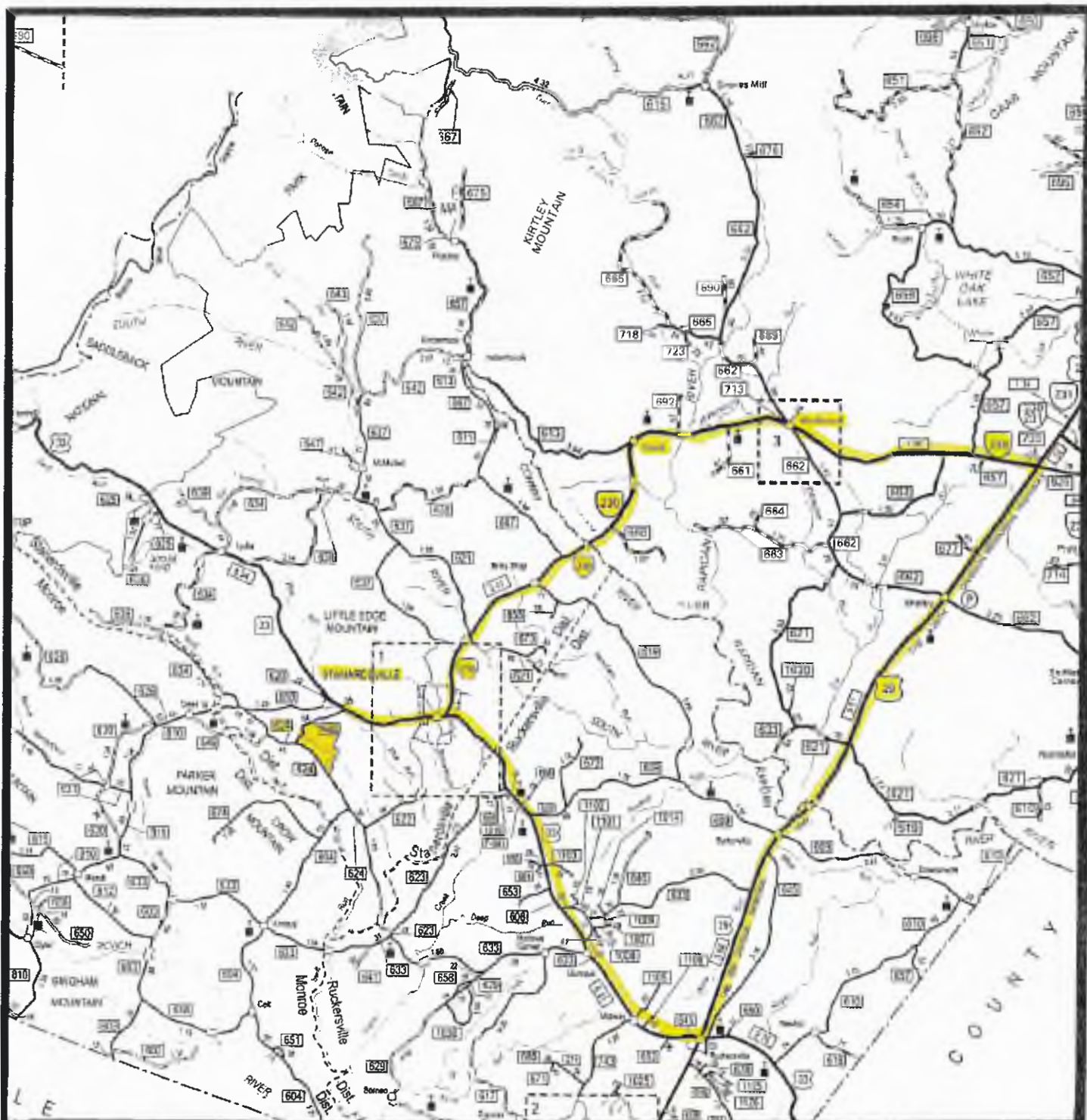
Field Warnings:

M P

Recyc SystemsTM

Inc.

(Biosolids Land Application)



Scale: 1 inch=2 mile

GRMG 1-4

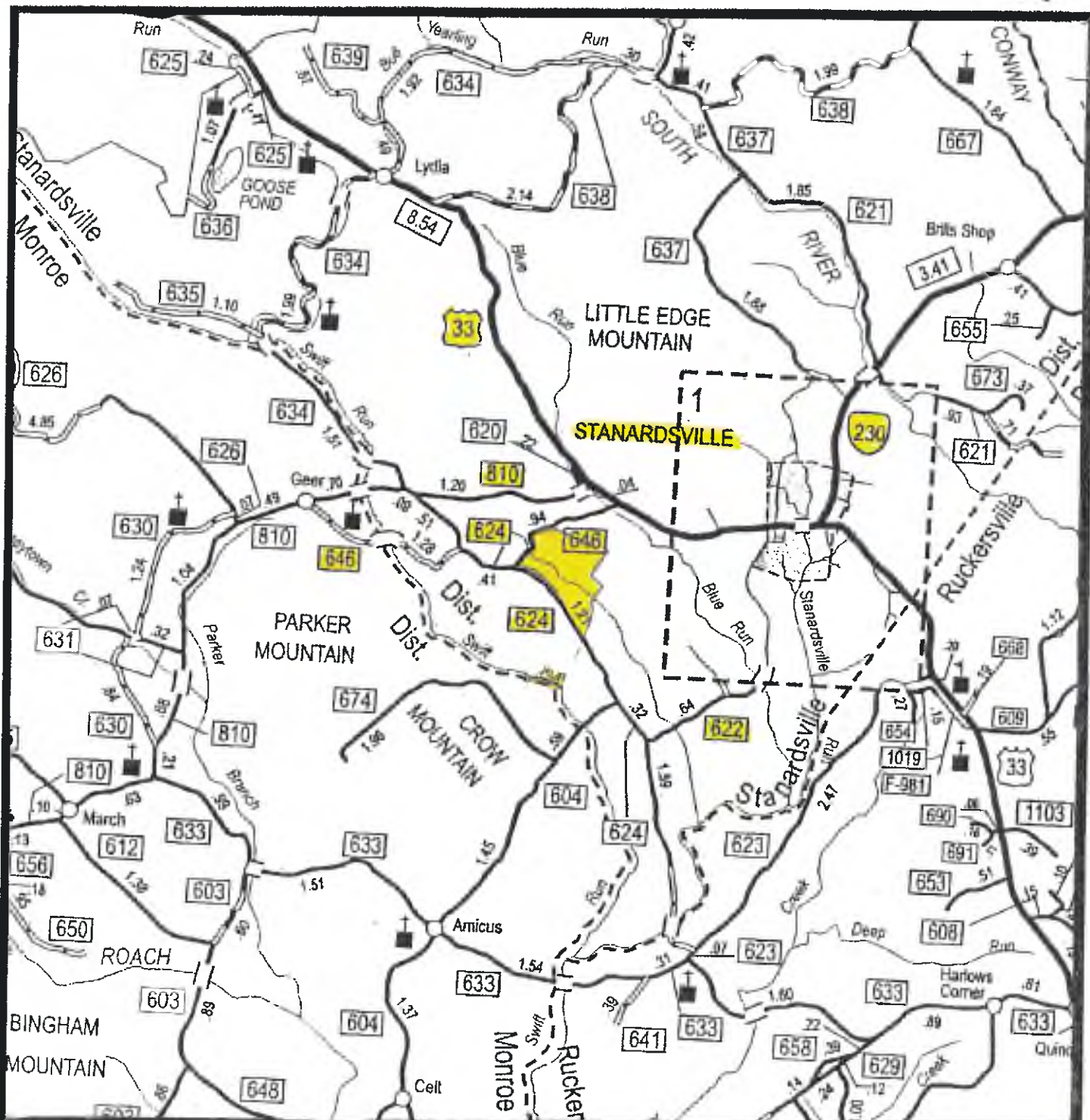
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VICINITY MAP



Recyc SystemsTM

Inc. (Biosolids Land Application)



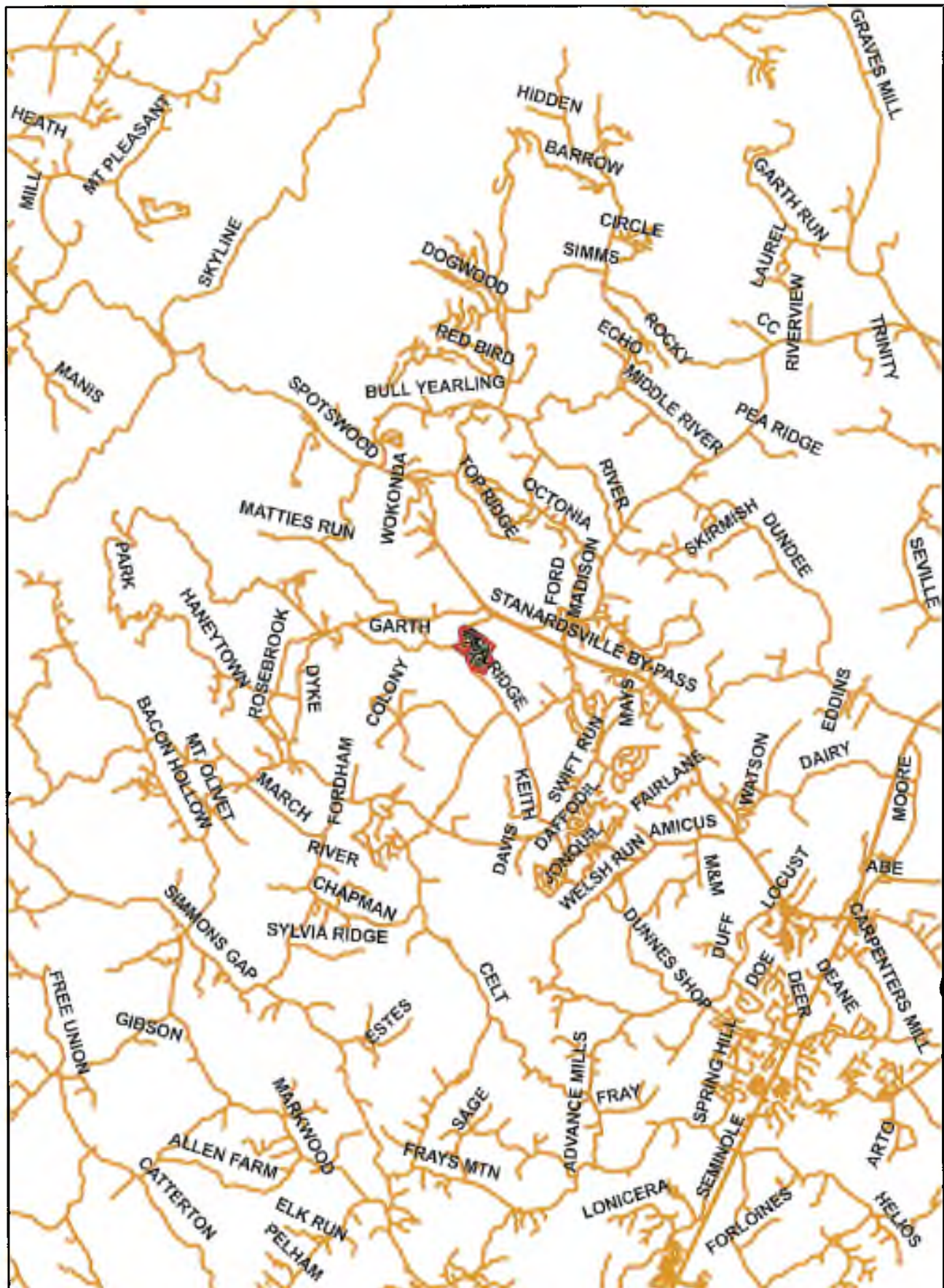
Scale: 1 inch=1 mile

GETMG 1-4

1-18-18

VICINITY MAP

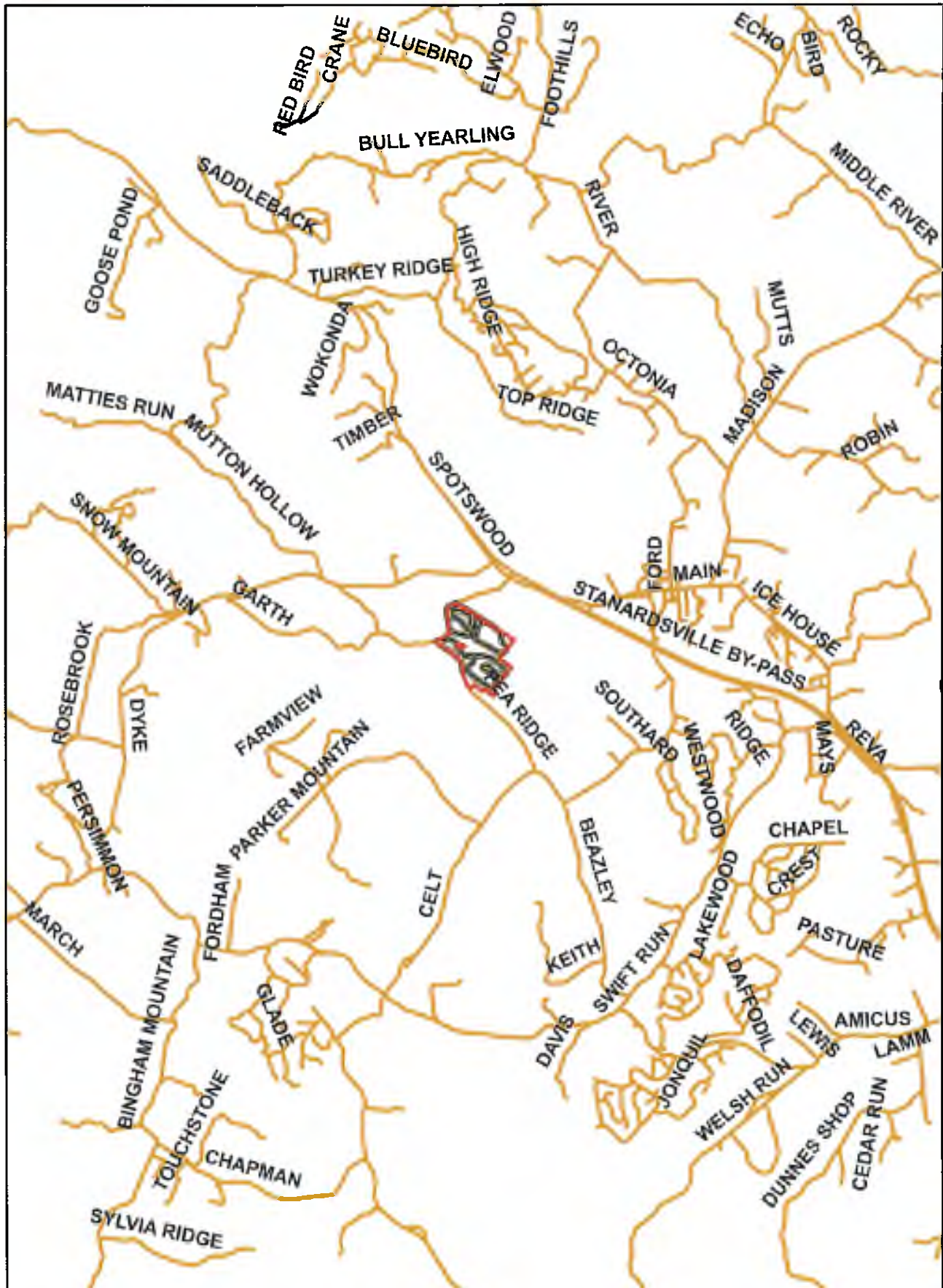




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Vicinity Map

1 in = 2 miles



1-18-18

Vicinity Map

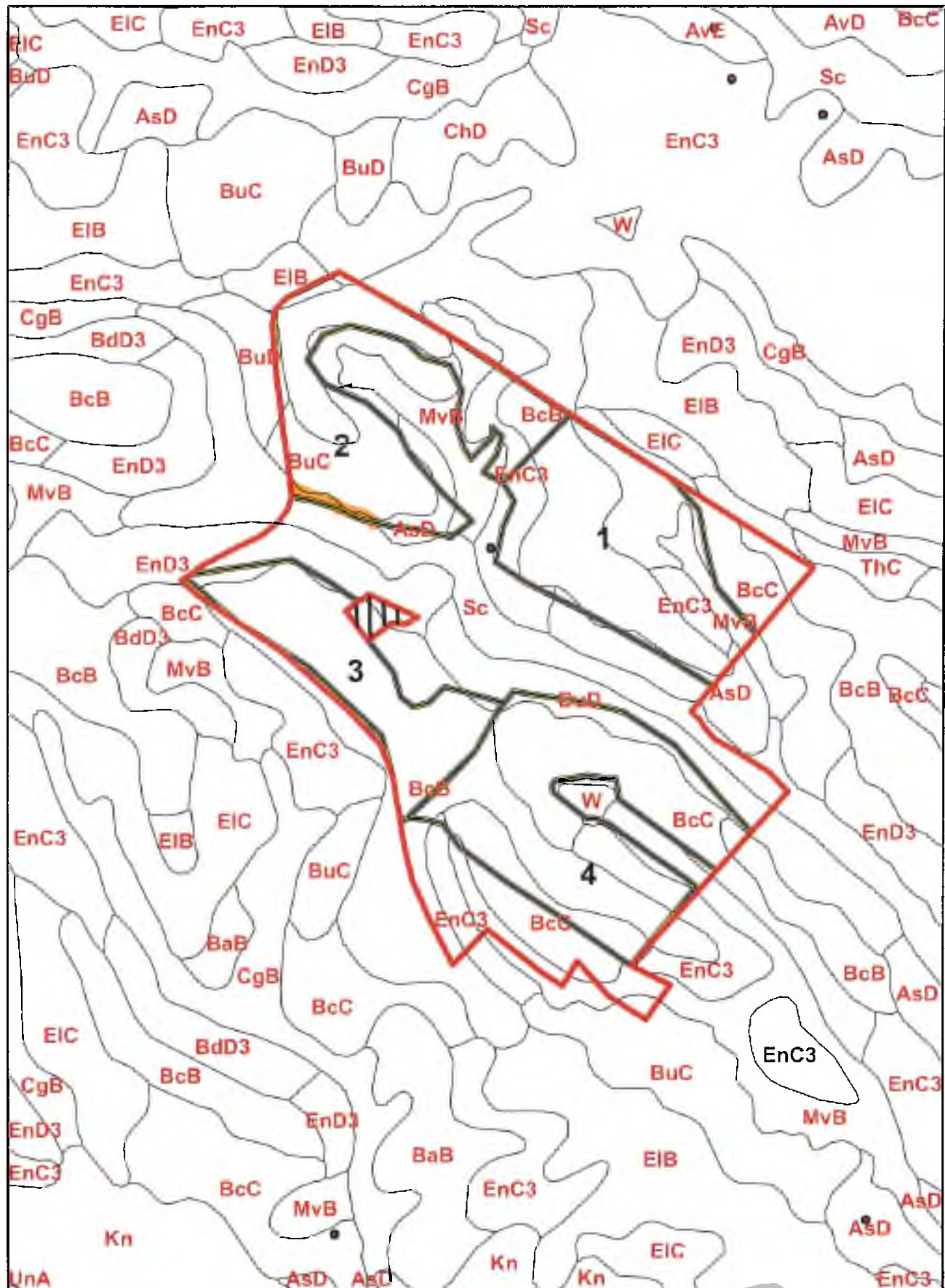
1 in = 1 miles

ADJOINING LANDOWNERS

Thomas M. Garth

GREENE COUNTY

Tax Map	Parcel #	Owner Name(s)
36-A	27	Lebert W. and Deborah G. Deane
	28	Gary W. and Patricia C. Myers c/o Hugh Collier
	29	Billie Jo. C. Clarke
	29A	Luther H. III and Katrina C. Breeden
	30	Ronnie W. and Betty Lou Roach
	30A	Barbara Jeane Conley
	32	Regina L. Dodd c/o Della Conley
	33	Hugh B. and Willie J. Collier
	45	Kyle Lawson et. als.
	45C	Frank W. Haselton Trustee of the Frank W. Haselton Rev Trust
	46	Ronnie E. and Doris J. Lawson
	46A	David and Donna Roach
	48	Norris and Alwinnie Deane
	56	Sherrard H. and Connie B. Flora
	56A	Montgomery H. Flora
	57A	Thomas M. and Annette Marie Garth
	57C	Jeremy T. Garth
	57D	James Michael and Katina Verna Morris
	57E	Shannah R. and Daniel L. Evans
36-2	A	Lyndon Byers
	B	Alban C. and Betty C. Berry c/o Betty Berry
37-A	2	Jo Ann Woods
	111	Gilmer E. Lawson et. als.



Soil Map

1 in = 660 feet



1-10-18
revised 08/24/20

Aerial Map

1 in = 660 feet



UNITED STATES DEPARTMENT OF
AGRICULTURE






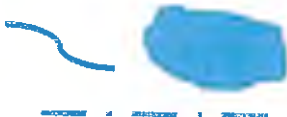









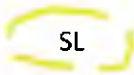


0 0.075 0.15 0.3 Miles

FSN 159 Tract 744
Thomas Garth

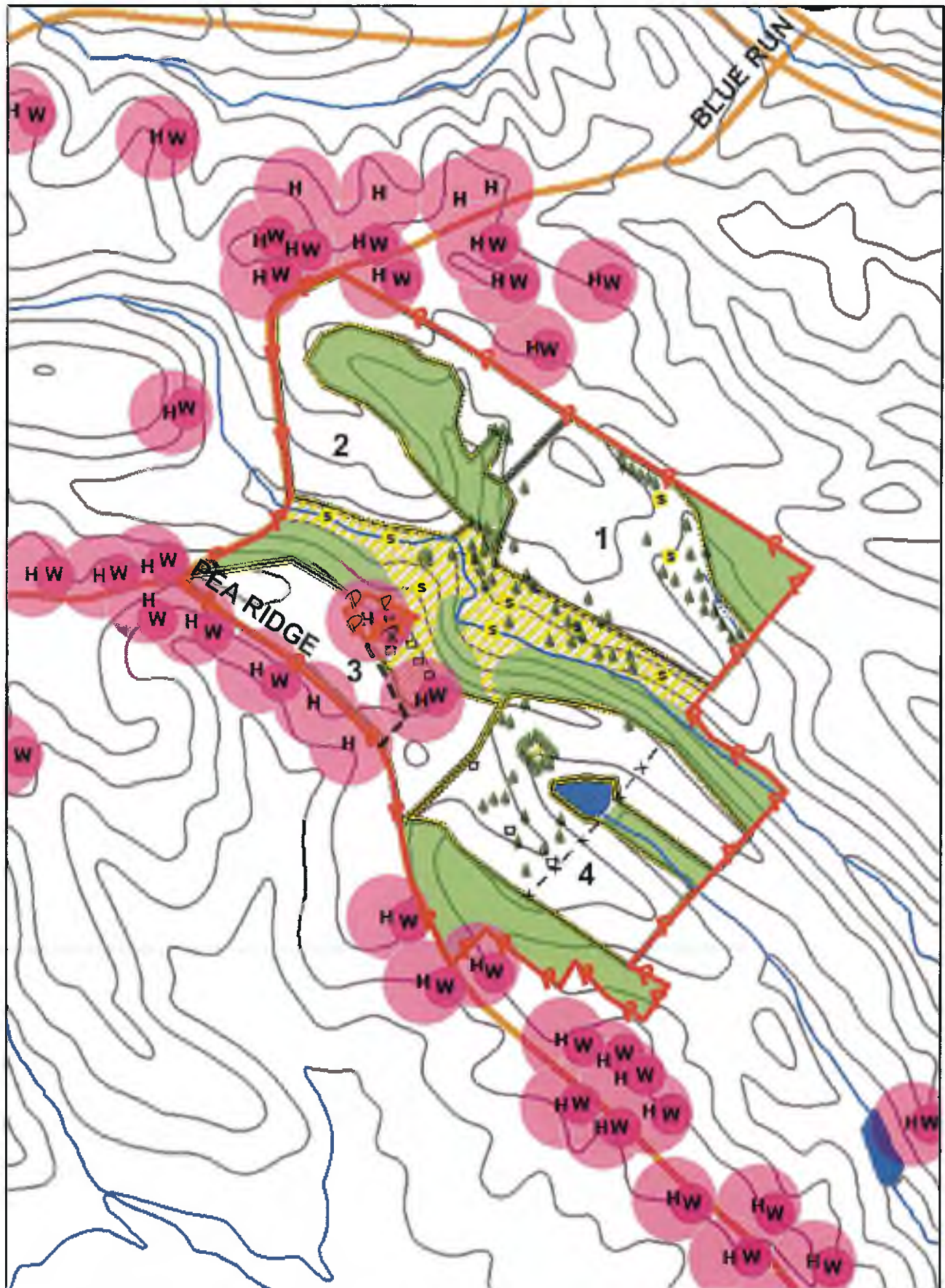


Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

Legend For Site Plan

Symbol	Feature	Minimum Setback
	House and Well	200 feet from occupied dwelling * 100 feet from water supply wells or springs
 	Well or Spring	100 feet from water supply wells or springs
	Streams or Surface Water	35 feet with 35 foot vegetated buffer 100 feet without vegetated buffer
	Wet Spot	
	Trees and Woods	
	Private Drive	
	Rock Area/Rock Outcrop	25 feet from rock outcrops 50 feet from limestone rock outcrops
	Severely Eroded Spot	18 Inch minimum depth of soil
	Sink Hole	100 feet from open sinkholes 50 feet from closed sinkholes
	State Road	10 feet from side of roadway
	Fence / Field Boundary	
	Property Line	100 feet from property line *
 	Slope	15% maximum
	Hashed out Area	No application

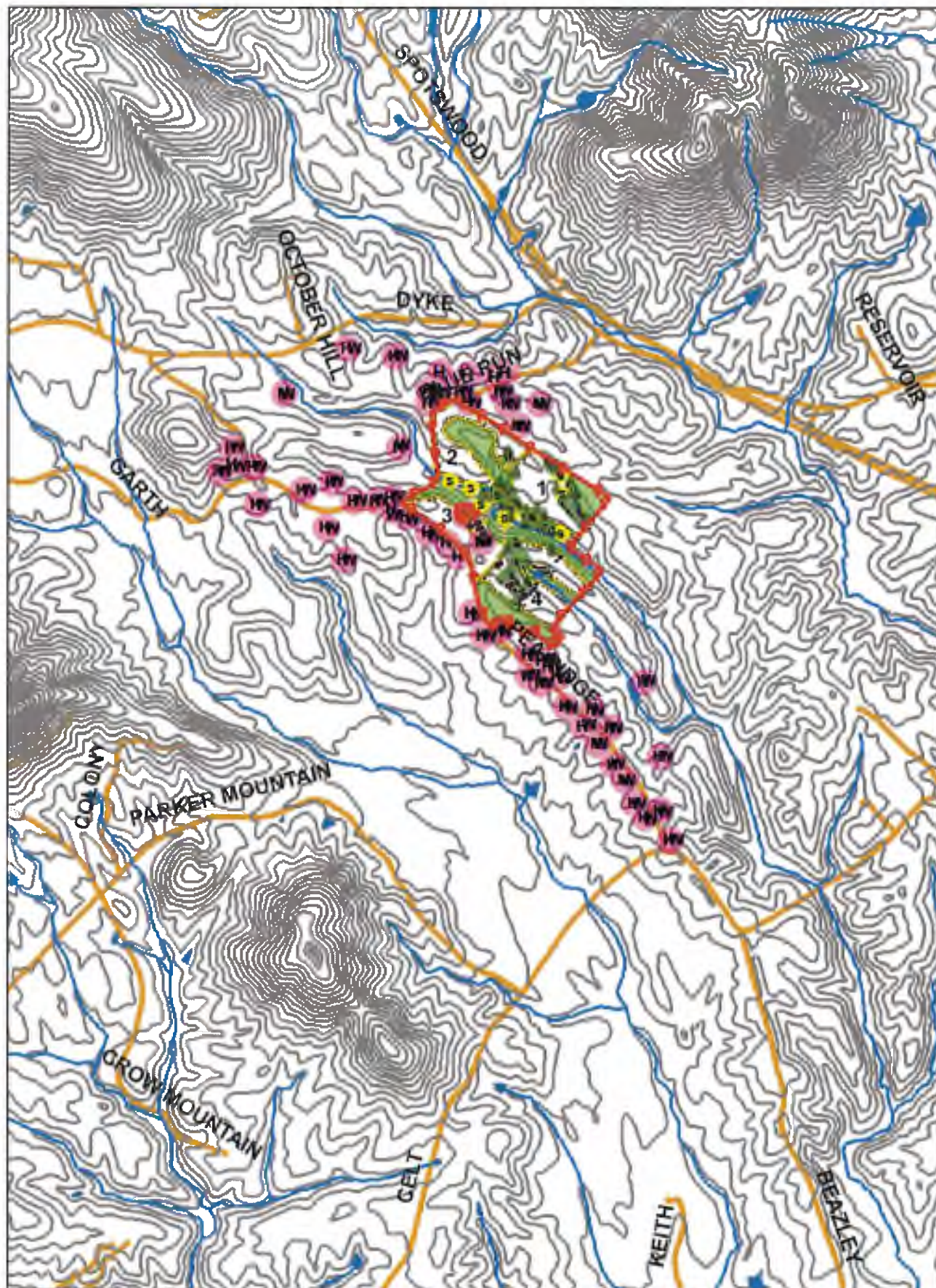
*Buffer can be reduced or waived upon written consent from landowner.



1-18-18

Site Map

1 in = 660 feet



1-18-18

Topographic Map

1 in = 2,000 feet